El Dorado/Alpine County Enforcement Work Plan 2006-07/2007-08

County Resources

- Senior Biologist—90% of time in Pesticide Use Enforcement (PUE)
- Biologist II—15% of time in PUE
- Biologist I—50% of time in PUE
- GIS duties performed by the Biologists involved in the PUE program

Workload expectations for FY 2006/2007 and 2007/2008 include:

- 195 restricted materials permits
- 1100 annual sites for restricted materials
- 385 Operator Identification Numbers (OINs)
- 230 Notices of Intent (NOIs)
- 65 Private Applicators Certified by Exams
- Pre-Application Site inspections on at least 5% of NOIs
- Conduct a minimum of 77 inspections in various categories; Applications & Mix/Load Inspections of Growers, PCOs, and Structural operators, Headquarters Inspections, Field Worker Safety, Fumigations, PCA and Dealer Records Inspections
- Ag-Urban interface issues have been increasing each year which increases complaint investigations

A. Restricted Materials Permitting

1. Permit evaluation

- Approximately 195 restricted materials permits are issued annually
- Permits are valid for one year, expiring at the end of the calendar year in which they are issued (December 31) which allows for regular review of permits
- Permits are mostly for permanent type crops (orchards, vineyards, forest) with only a small amount of applications for seasonal crops (pumpkins, tomato, etc.)
- Permits are only issued by three licensed and trained staff and occasionally by the Assistant Agricultural Commissioner.
 - Senior Agricultural Biologist
 - · Agricultural Biologist II
 - Agricultural Biologist I
- Permits are issued to the operator of the property or their authorized representative. A letter of authorization from the property operator is required for issuance of a permit to anyone other than the operator
- Individual appointments are required for permit issuance and are scheduled in advance so files can be reviewed and new permit

- applications can be prescreened for hazards that may necessitate denials prior to the appointment
- Due process is provided when denying a permit
- Permits are only issued to Certified Private Applicators or Qualified Applicator Certificate or License holders
- Permit issuance takes approximately one hour
- The majority of permits are issued for azinphos-methyl, carbaryl, 2,4-D, paraguat, strychnine and aluminum phosphide.
- Pesticides on permit are verified for site and commodity
- Permits are reviewed with the operator during issuance to determine if there have been changes to adjacent properties which could create a potential environmental or health effect impact
- Permittees are asked whether alternatives to restricted materials were considered
- Permittees are asked what mitigation measures were considered to reduce the risks of the use of a restricted material
- Permits are conditioned to mitigate various hazards
- Department of Pesticide Regulation Recommended Permit Conditions are utilized
- Permits are entered into the Restricted Materials Permit Program (RMPP)
 using the Agriculture GIS (geographic information systems) program for El
 Dorado County and DPR's RMPP program for Alpine County
- All agricultural permits are site specific and maps are required
- Sites are identified by an alpha numeric system, typically with the number identified with a specific site map and the letter identifying a commodity
- Maps are created in a GIS database for EI Dorado County which includes parcel, road, aerial photos, water (creeks, lakes, ponds, irrigation ditches) layers and Topo maps. There are also created layers for schools, organic farms, crops and Bus Routes of the Camino School District
- Sensitive areas are identified on the map
- Handouts that are reviewed with permittee at time of permit issuance include:
 - Restricted material permit conditions
 - Notice of Intent forms and submission requirements
 - Pesticide Safety Information Series A or N
 - Worker Protection Standards synopsis
 - Field Worker Safety regulations
 - Field Posting regulations
 - Handler training regulations
 - California Restricted Materials sheet
 - Pesticide Use Report forms and instructions
 - Employer and Business Pesticide Use Compliance Guide
 - Information from DPR's PRESCRIBE (Pesticide Regulation's Endangered Species Custom Realtime Internet Bulletin Engine) endangered species online database
 - Complying with rules on dormant sprays

- New regulations
- The County administers private applicator certification exams on an individual basis
- Certification exams take approximately one hour
- Permit renewals and certification exams generally occur from December thru March
- Major changes on the permit (adding a pesticide or commodity, add/delete a site) require permittee to sign and date the amended permit. Minor changes (phone numbers, etc.) are just noted on the permit

Strengths

- Permit appointments are on an individual basis which makes conveyance of information easier
- GIS component that utilizes a variety of layers (Aerial photos, Topo maps, Parcel layer that is updated weekly)
- Very little aerial spraying is done in the county
- Staff is experienced setting up buffer zones when needed
- Limited PUE staff allows good knowledge of local conditions
- Utilize DPR's PRESCRIBE endangered species online database

<u>Weaknesses</u>

- This will be the Biologist I's first year working in restricted materials permitting so will require maximum oversight by the experienced Biologists
- Many commodity sites with the same site number but non-contiguous borders were divided into separate sites during the 2005/2006 season but there are more sites that need to be re-evaluated with growers during the upcoming permit renewals
- Currently, the aerial maps used for review are 2003 data. There were some conflicts with the 2004 aerial layer and our GIS system. The county is planning on purchasing the 2006 aerial layer
- Location of employee housing on permitted property has only been addressed on a limited number of properties

Goals

Correct weaknesses found during the evaluation process for restricted materials permits and continue to evaluate the process for improvements with considerations given to any new regulations or Enforcement letter updates that may apply to the permitting process.

Implement new layers/buffers in the Ag GIS program as information becomes available.

<u>Deliverables</u>

- Continue to add new sites to permits that have a non-contiguous commodity to better address sensitive site issues to each block
- Request NOI for ground water materials so pre-site inspections can occur to evaluate for sensitive sites (wells)
- Continue to locate employee housing on file maps during 06/07 permit season
- Continue to work towards a more current aerial layer for our GIS maps
- Implement a hydrology layer from the US Forest Service which shows seasonal drainages and creeks that may not appear on other layers we are utilizing in the Ag GIS permit program
- Implement a ¼ mile buffer layer around schools in the Ag GIS permit program
- Implement an Organic Farms layer in the Ag GIS permit program
- Incorporate a layer into our Arc Map GIS database that utilizes Section/Township/Range endangered species information from DPR's PRESCRIBE Database

Measure Success

- At end of FY 2006/2007 files will have improved sites for evaluation
- At end of FY 2006/2007 new layers will be implemented into the Ag GIS permit program or Arc Map GIS database
- At end of FY 2006/2007 progress will be made towards a new aerial layer in the GIS system
- At end of FY 2006/2007 employee housing will be located on file maps

2. Site Monitoring Plan Development

- Approximately 1100 annual sites
- Approximately 230 Notices of Intent are received a year
- NOI are reviewed by either of two licensed and trained staff, Senior Ag. Biologist or Ag. Biologist II
- 24 hour NOIs are required
- NOI are accepted by telephone, fax, or in person. In person or by fax are accepted on weekdays only, 8:00 am 5:00 pm. There is a staff telephone with voice mail that can be dialed direct or office staff can direct the call so licensed staff can review them Mondays-Fridays 8:00 am 5:00 pm during weekdays.
- NOI are recorded on a paper form that are filed monthly in the individual permit files
- All non-agricultural RM permits are required to submit a NOI until one inspection has occurred during the calendar year

- The majority of NOIs are for the following restricted materials and crops including the usual time of year received
 - Azinphos-methyl for apples/pears, May-August
 - Carbaryl for apple thinning, April-May
 - 2,4-D for pasture & rangeland, February-April/ for forest, May-June
 - Paraguat for wine grapes, April-May
 - Strychnine for wine grapes & orchards, April-June
 - Aluminum Phosphide for landscaped areas, March-August
 - Sulfuryl fluoride for structural fumigations, approx 20 per year (number has been increasing over the past couple of years)
- El Dorado County has very little rotational crops. Most non-permanent crops are grown for the farmers' market season and use non-restricted materials if treatment is needed
- Pre-application site inspections are performed on at least 5% of NOI received per year
- Sites to evaluate are based upon:
 - Pesticide's potential to cause adverse health effects
 - Pesticide's potential to cause adverse environmental effects
 - Applications near residences
 - Application near roads
 - Applications near sensitive crops or organic farms
 - If operator has employee handlers and/or fieldworkers
 - Previous NOI denials
 - Compliance histories
 - Presence of Endanger/Threatened species in the area
 - Local conditions which increase potential for drift
- NOI are reviewed to ensure
 - A valid RM permit was issued for the material to be applied and is listed for the intended site
 - Application site is allowed by the label, Section 18 or SLN
 - Rate per acre is allowed
 - Pest Control Business is licensed in the proper category
 - If environmental changes have occurred since permit issuance the site is reviewed for potential hazards

Strengths

- Many growers have started using less hazardous pesticides in their spraying rotations
- The increase in site numbers (due to better identification of separate blocks) has allowed better evaluation of NOIs
- Most sites have had very few changes to adjacent environments

- The Apple Hill Growers Association uses one PCA for their recommendations who also lives in the area
- Staff with knowledge of local conditions
- Dedicated phone line for NOIs
- El Dorado County has implemented the use of Tablet PCs for inspections so compliance histories will be available during Pre-application site inspections
- Pre-application site inspections were performed on over 10% of the NOI received during 2006

Weaknesses

- Many NOIs are received on the weekends when staff may not be available to check the voice mail line. If staff is available to check the voice mail from home, all files are at the office
- Due to the increase in sites on permits more NOIs are received that need evaluation. Newly licensed staff needs training in Pre-application site evaluations.

<u>Goals</u>

Ensure that the site-monitoring plan is effective and takes into consideration risk factors such as:

- Pesticide hazards associated with azinphos-methyl (a cholinesterase inhibitor), carbaryl (a carbamate pesticide), paraquat (acute toxicity herbicide), phenoxy herbicides (2,4-D) which can volatilize and move off site, strychnine (convulsive poison), aluminum phosphide (acute inhalation toxicity), sulfuryl fluoride (acute inhalation toxicity) or any other RM used
- Local conditions such as wind patterns, temperature, inversions, new or old housing developments with ag/urban interface, endangered species habitats
- Compliance histories of the permittee, employee handlers, pest control operator and pest control advisor

Notice of Intents will be conditioned so they will be received by 4:00 pm on Fridays for weekend applications. This will allow staff to conduct site evaluations before the application occurs.

Train newly licensed staff in site evaluations.

Deliverables

- Pre-Application inspections will continue to be done for at least 5% of the
- Notice of Intents with less than 24 hour notice will be given Violation Notices

 NOI logs will show that they were received by 4:00 pm on Friday for weekend applications

Measure Success

- Review of NOI numbers and Pre-Application inspections during FY 2006/2007 will show at least the minimum 5% site inspections
- NOI logs will show that they were received at least 24 hours before start of planned application and less were received on the weekends

B. <u>Compliance Monitoring</u>

1. Comprehensive Inspection Plan

- Inspections are performed by three licensed and trained staff
 - Senior Agricultural Biologist
 - Agricultural Biologist II
 - Agricultural Biologist I
- Inspections are usually performed between 8:00 am 5:00 pm but some occur earlier or later as schedules allow
- Approximately 25% of all inspections are scheduled
 - Headquarter inspections
 - PCA records inspections
 - Forestry inspections
 - Pre-Application site inspections if access permission is requested by operator
- The majority of agricultural inspections take place February August and are in mainly two geographic areas of the county
 - Apple Hill which runs from Placerville through Camino and consists of orchards and vineyards
 - South County (Somerset, Fairplay & Mt Aukum areas) which consists mostly of vineyards
- Approximately 50% of the inspections per year are agricultural (applications and mix/loads done by growers or PCO's and Field Worker Safety inspections). Inspections are either random or targeted because of NOIs
- Targeted surveillance and inspections of Ag. Applications are based on
 - Toxicity of pesticides applied (from NOI)
 - Prior areas of episode occurrence
 - Compliance history of operator
 - Employee handlers
 - If fieldworkers are present in area
- Approximately 25% of inspections are in more urban areas (El Dorado Hills, Cameron Park, Placerville and South Lake Tahoe) and are random surveillance of structural pest control businesses and landscape maintenance firms.

- Analysis of the 03/04 & 04/05 fiscal year inspections shows that overall there was a 6% non-compliance rate
- Analysis of the 05/06 fiscal year inspections show
 - For Use Monitoring Inspections 10% of the property operators had non-compliances
 - 100% of Field worker Safety Inspections had non-compliances
 - Structural Pest Control businesses had a 6% non-compliance rate for applications
- The frequency of headquarter employee safety inspections is currently about every 2-3 years
- The frequency of dealer inspections is every 1-2 years
- The frequency of PCA records inspections is every 1-2 years

<u>Strengths</u>

- An annual permit cycle allows updating growers on new regulations and changes
- An annual review of files allows review of prior non-compliances for the year and non-compliances in paperwork submission to the department
- A staff familiar with the seasonal pesticide application cycles within the county
- Increased compliance monitoring in geographic areas where previous episodes have occurred
- The number of monitoring inspections conducted in FY 05/06 were consistent with the goals for that period
- Tablet PCs are now used for inspections so compliance histories are immediately available

Weaknesses

- Enforcement implementation throughout the county is not uniform. The South Lake Tahoe area is not covered as easily due to small staff
- Headquarters inspections are generally conducted during the same time of year that permits are issued which stretches resources of staff PUE inspectors
- More growers have field workers at some point during the production season so there needs to be an increase in headquarters inspections during that time

Goal

The compliance inspection plan will ensure that pesticide use is adequately monitored and effective throughout the county and increases compliance in areas of deficiencies previously identified

Coordinate with DPR to conduct 5-6 joint oversight inspections per year

Deliverables

- Maintain frequency of inspections for structural headquarters, dealer, and advisor inspections
- Increase frequency of grower headquarter inspections where field worker safety violations have occurred
- Increase field worker safety inspections
- Maintain surveillance for unlicensed Pest Control landscape businesses
- Continue targeting restricted material applications for inspections

Measuring Success

- Review inspection records in FY 2006/2007 to see if inspection frequency is maintained or increased
- Review non-compliances from inspections during FY 2005/2006 and adjust targeted inspections to coincide with problems
- Review inspection records in FY 2006/2007 to make sure they include Use Monitoring inspections of restricted materials

2. Investigation Response and Reporting Improvement

Investigation Response and Reporting

- Investigations are conducted by two licensed and trained staff: Senior Ag Biologist who conducts approximately 80% of the investigations and an Ag. Biologist II who conducts approximately 20% of the investigations. Training of the Ag. Biologist I in investigation response will begin in 06/07
- The Assistant Agricultural Commissioner oversees investigation progress
- Complaints are received by the secretary and directed to one of the PUE biologists or the Assistant Agricultural Commissioner
- Investigations of complaints are initiated in a timely manner
- All complaints that may be associated with pesticides are investigated and documented on a complaint form or in an investigation report
- The Senior Pesticide Use Specialist from DPR is informed of complaints that may involve environmental or human health effects
- All investigation reports are reviewed and signed by the Agricultural Commissioner once completed
- Investigations are conducted using the DPR Pesticide Episode Investigation Procedures Manual
- Sampling is done following DPR's Investigative Sampling Manual
- In the last two fiscal years, there were 10 investigations/complaints
- All investigations were non-priority investigations
- All of the investigation reports were completed within 120 days and none were returned for additional information

 A Complaint/Investigation log is kept which includes: Date, File name, Pesticide involved, Type of episode, Location of episode, if violations were found, Date investigation closed

<u>Strengths</u>

- Investigation of complaints are usually initiated on the day they are received
- Over 50% of the complaint investigations are completed in 3 5 days
- Investigation reports are completed within the 120-day requirement
- Staff stays current with investigative training
- Violations discovered during investigations has allowed the department to take preventative measures (ex: bus route buffer zones) and direct applicators to alter methods to prevent future incidents

Weaknesses

Based on the findings of the Effectiveness Evaluation, no areas of investigation response or reporting were identified as needing improvement.

Goal

The goal is to maintain the current investigation response plan and continue to initiate and complete all investigations in a timely manner with accurate and thorough reporting

Deliverables

- Investigation of complaints and episodes that are initiated and completed in the timely manner required by the state
- Investigation reports that are complete, accurate and discuss violations discovered during the investigation
- Work on developing an Arc GIS component that can be used with the Tablet PCs in the field in response to incident investigations

Measure Success

- Review at end of 2006/2007 investigation reports that were not completed on time
- Review at end of 2006/2007 investigation reports that were returned for being incomplete

C. <u>Enforcement Response</u>

Enforcement Response Evaluation

- Compliance actions (Violation Notice, Warning Letters) are done by two licensed and trained staff, a Senior Ag. Biologist and Ag. Biologist II
- Training an Ag Biologist I in enforcement response will begin in 06/07
- Enforcement actions are discussed with the Agricultural Commissioner and Assistant Agricultural Commissioner prior to implementation
- Enforcement actions are prepared by the Senior Ag. Biologist
- The Department of Pesticide Regulation and County Agricultural Commissioners Enforcement Response Regulations are followed to determine the appropriate action based on violations that occurred
- NOPAs provide respondents with the proposed fine level, the details of the alleged violations with cited code sections and their rights to a hearing to review evidence and be heard
- All Enforcement actions are reviewed and signed by the Agricultural Commissioner
- For Agricultural Civil Penalties the fine guidelines in CCR Title 3, 6130(a) are followed
- For Structural Civil Penalties the fine guidelines in CCR Title16, 1922(a) are followed
- A Pesticide Enforcement/Compliance Action Summary is prepared for each NOPA
- A separate set of files are kept for each NOPA respondent so you can quickly review if there were previous enforcement actions

Strengths

- Small staff allows for timely approval of actions
- Files are easily reviewed for previous actions
- Use DPR guidelines and sourcebooks for action preparation

Weaknesses

- With a limited PUE staff, enforcement actions and hearings can take time away from other program areas
- There is no real timetable for enforcement/compliance actions other than the limit of within two years of violation occurrence

Goal

Ensure enforcement actions in response to violations are fair, consistent and timely

Deliverables

 Development of a timetable for enforcement/compliance actions after verification of a violation

Measure Success

- A review of compliance actions in FY 2006/2007 shows they were prepared in a timely manner
- A review of enforcement actions in FY 2006/2007 show they were prepared (and went to hearing if applicable) in a timely manner
- Review enforcement/compliance actions for FY 2006/2007 to verify consistency with enforcement response and penalty regulations